

Amendments to the Specification

Please amend the specification as follows:

[0040] In the example of FIG. 2, the 48/44.1/32 KHz audio data 106 is based upon a time base of about 27 MHz. Although in the example of FIG. 2 the time base of the STC pulses 214 is the same as the time base of the system clock 212 (also 27 MHz), this need not be the case. The STC pulses 214 do not include any significant drift and, therefore, provide an excellent timing mechanism by which the rate manager 200 can produce the fractional value 201 and a next input value 223. ~~For example, if the audio data 106 comes in at a sample rate of 48 KHz (based upon a time base of 27 MHz).~~ Next, the STC pulses 214 are received by the rate manager 200 at a rate of one STC pulse precisely every 562.5 clock cycles ($27\text{ MHz}/48\text{ KHz} = 562.5\text{ clocks}$).

[0044] Each time the ASRC 202 needs to output a new 843.75 KHz sample, it reads the fractional value 201 to determine the relative position of the output sample. For example, the occurrence of the input sample 304 (within the rate manager 202) serves as a trigger for the ASRC 202 to correspondingly produce the output sample 310 and all subsequent output samples, including a final output sample 317, that occur before the next input sample 306 is received. Each of the 16 output samples, 310 through 317, is produced within the timing boundaries of the input samples 304 and 306. And the position of each output sample, for example 310 - 317, is precisely determined by ~~one~~ a corresponding one of the fractional values 201. Stated another way, each of the corresponding fractional values 201 is calculated in order to position the output samples 310 - 317 relative to the input sample 304.